

Claims

1. A gas generator for an air bag comprising a housing having a gas discharge hole, first and second ignition means activated by the impact, and first and second combustion chambers accommodating therein gas generating agents which are ignited and burnt to generate a combustion gas, wherein

the first combustion chamber and the second combustion chamber are separated from each other by a partition wall, a volume ratio of the first combustion chamber and the second combustion chamber is adjusted in the range of 1/1 to 9/1 by the partition wall.

2. A gas generator according to claim 1, wherein an inner cylinder is disposed in the housing, an annular first combustion chamber is provided outside the inner cylinder, two ignition means are provided at the lower side in the inner cylinder and further, a second combustion chamber is provided at the upper side in the inner cylinder.

3. A gas generator for an air bag according to claim 2, wherein a diameter of the inner cylinder disposed in the housing varies at a vertical position in the axial direction of the housing.

4. A gas generator for an air bag according to claim 2, wherein a diameter of the inner cylinder disposed in the housing varies at a vertical position in the axial direction of the housing, and an upper portion of the inner cylinder is greater than a lower portion of the inner cylinder in diameter.

5. A gas generator for an air bag comprising a housing having a gas discharge hole, first and second ignition means activated by the impact, and first and second combustion chambers accommodating therein gas generating agents which are ignited and burnt to generate a combustion gas, wherein

the first combustion chamber and the second combustion chamber are separated from each other by separating means having a communication hole, the second combustion chamber is disposed such that it is enclosed by the first combustion chamber,

flammability of the second combustion chamber is adjusted by the communication hole.

6. A gas generator for an air bag according to claim 5, wherein a retainer is disposed in the second combustion chamber, the communication hole and the gas generating agent are separated from each other by the retainer such that the communication hole and the gas generating agent do not come into contact with each other.

7. A gas generator for an air bag according to claim 6, wherein the retainer is a wire mesh.

8. A gas generator for an air bag according to claim 5, wherein the number of gas discharge ports formed in the housing is two or more, the gas discharge ports are closed with shielding members before the gas generator is activated, the shielding members are ruptured in many stages after the gas generator is activated.

9. A gas generator for an air bag comprising a housing having a gas discharge hole, first and second ignition means

activated by the impact, and first and second combustion chambers accommodating therein gas generating agents which are ignited and burnt to generate a combustion gas, wherein

the first combustion chamber and the second combustion chamber are separated from each other by a partition wall, the first combustion chamber and the second combustion chamber are brought into communication with each other only through a communication hole formed in the partition wall, a combustion gas generated in the second combustion chamber flows into the first combustion chamber from the communication hole and then, is discharged from the gas discharge hole,

a volume ratio of the first combustion chamber and the second combustion chamber is adjusted in the range of 1/1 to 9/1 by the partition wall, and a combustion state of a gas generating agent in the second combustion chamber is controlled by the communication hole.

10. A gas generator for an air bag according to claim 1 or 5, wherein a combustion temperature of the gas generating agent is 1000 to 1700°C.